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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,196	06/18/2008	Bernhard Gellrich	LO29-030	5696
21567	7590	12/01/2010	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			DOAK, JENNIFER L	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,196	<b>Applicant(s)</b> GELLRICH ET AL.	
	<b>Examiner</b> Jennifer L. Doak	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22,24-46 and 49-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22,24-46,49-57 and 59-61 is/are allowed.
- 6) ☒ Claim(s) 58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/17/10</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 58 is rejected under 35 U.S.C. 102(b) as being anticipated by Kaufman (US 5323301).

Regarding independent claim 58, Kaufman discloses the system having at least one system diaphragm (Figs. 1 and 2: via 18a and 18b), the system diaphragm comprising a multiplicity of mobile plates (18a) which are rotatably mounted (via ring bearing 26), wherein the plates have a spherical curvature (Fig.1; col. 3, lns. 25-27); wherein a drive unit for moving the plates is arranged outside a gas space (Fig. 1: 12 – 3200° K lamp with filament 14 -- the bulb is filled with gas).

### ***Response to Arguments***

Applicant's arguments submitted 9/17/10 have been considered, but are not found persuasive.

Applicant argues at length that the lamp of Kaufman does not include gas and therefore cannot read on the claim.

Examiner respectfully disagrees. Applicant's argument is unclear to Examiner, since it appears inconsistent with evidence (KLIPSTEIN) supplied in the IDS of 9/17/10 because it discusses (at or about the end of p. 2 of 9 to the top of p. 3 of 9) how modern bulbs have gas in

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them for multiple reasons including extending the life of the filament and improving efficiency.

However, it may be noted that other bulb types like fluorescents may have a gas that improve/contribute/constitute light emission of the bulb. No special definition of gas is found in the present specification, and, absent a special definition, Examiner is obligated to take the broadest reasonable interpretation not in conflict with the specification. It is noted that the feature upon which applicant relies has been given its broadest reasonable interpretation.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Allowable Subject Matter***

Claims 22, 24-46, 49-57, 59-61 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 22, though the prior art discloses:

An optical imaging device, comprising: at least one system diaphragm, the system diaphragm comprising a multiplicity of mobile plates, each mobile plate is which are rotatably mounted on a pivot axis, wherein the plates have a spherical curvature wherein each pivot axis extends through a center of curvature (C) of a sphere,

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

and wherein the sphere is defined as a single spherical surface in which the mobile plates move relative to one another.

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The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 40, though the prior art discloses:

A variable system diaphragm for a microlithographic projection exposure apparatus having a multiplicity of plates held in a mobile fashion by means of solid state articulations; and wherein each mobile plate is rotatably mounted on a pivot axis defined by the solid state articulations, wherein each pivot axis extends through a center of curvature (C) of a sphere,

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

and wherein the sphere is defined as a single spherical surface in which the mobile plates move relative to one another.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 42, though the prior art discloses:

A variable system diaphragm having a multiplicity of mobile plates, the plates having a spherical curvature and being rotationally mounted, rotational bearing axes of the plates being aligned with a center of curvature (C) of a sphere,

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

and the sphere determining a single surface on which the plates are mobile relative to one another.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 45, though the prior art discloses:

A projection objective in semiconductor lithography having optical elements, at least one variable system diaphragm for a microlithographic projection exposure apparatus being provided for introduction into a concave surface of an optical element, the diaphragm following a curved surface, and wherein the diaphragm comprises a plurality of mobile plates, each mobile plate is rotatably mounted on a pivot axis, wherein each pivot axis extends through a center of curvature (C) of

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a sphere,

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

and wherein the sphere is defined as a single spherical surface in which the mobile plates move relative to one another.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 55, though the prior art discloses:

An optical imaging device comprising: at least one system diaphragm, the system diaphragm comprising a multiplicity of mobile plates, each mobile plate is rotatably mounted on a pivot axis, wherein the pivot axis extends through a center of curvature (C) of a sphere, and wherein the sphere is defined as a surface in which the mobile plates move relative to one another; and

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

wherein at least two of the mobile plates are arranged to rotate on respective pivot axes in an overlapping configuration on two different spherical surfaces, the two different spherical surfaces having an identical center of curvature (C).

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 57, though the prior art discloses:

An optical imaging device, in particular an objective for semiconductor lithography, having at least one system diaphragm, the system diaphragm comprising a multiplicity of mobile plates which are rotatably mounted, wherein the plates have a spherical curvature; and wherein the mobile plates are movable by means of a drive ring, the drive ring being mounted rotatably about an optical axis

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the prior art of record fails to teach or suggest the aforementioned combination further comprising:

via solid state articulations.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 59-61, though the prior art discloses:

An optical imaging device comprising a microlithographic projection objective, the device comprising: at least one system diaphragm, the system diaphragm comprising a multiplicity of mobile plates which are rotatably mounted, wherein the plates have a spherical curvature; wherein a drive unit for moving the plates is arranged outside a gas space (G);

the prior art of record fails to teach or suggest the aforementioned combination further comprising:

and wherein at least one of the multiplicity of the mobile plates is arranged inside the gas space (G).

With respect to claims 24-39, 51-54, these claims depend on claim 22 and are allowable at least for the reasons stated *supra*.

With respect to claim 41, this claim depends on claim 40 and is allowable at least for the reasons stated *supra*.

With respect to claims 43-44, these claims depend on claim 42 and are allowable at least for the reasons stated *supra*.

With respect to claims 46, 49, 50, these claims depend on claim 45 and are allowable at least for the reasons stated *supra*.

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With respect to claim 56, this claim depends on claim 55 and is allowable at least for the reasons stated *supra*.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is (571)272-9791.



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The examiner can normally be reached on Mon-Thurs: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L. D./  
Examiner, Art Unit 2872

/Stephone B. Allen/  
Supervisory Patent Examiner, Art Unit 2872